

Atlantic Richfield Company

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4 Centerpointe Drive, 4-435
La Palma, CA 90623
Direct: (714) 228-6770

June 5, 2014

Mr. Steven Way
On-Scene Coordinator
Emergency Response Program (8EPR-SA)
US EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

Delivered via e-mail

**Subject: May 2014 Monthly Progress Report
Rico-Argentine Mine Site – Rico Tunnels
Operable Unit OU01, Rico, Colorado**

Dear Mr. Way,

This progress report describes activities conducted during the month of May 2014 at the Rico-Argentine Mine Site (site) and activities anticipated to occur during the upcoming month. These activities are organized by task as identified in the Removal Action Work Plan. This progress report is being submitted in accordance with Paragraph 35.a of the Unilateral Administrative Order for Removal Action (the "UAO"), dated March 17, 2011.

ACTIVITIES FOR MAY

This section describes significant developments during the preceding period including actions performed and any problems encountered during this reporting period.

Site-Wide Activities

- Meeting with EPA on May 6, 2014, in the Town of Rico to provide project updates for the Wetland Demonstration project, Solids Repository, St. Louis Tunnel Hydraulic Controls, Pond 14 Solids Removal, and Site Sampling and Monitoring.
- Conducted annual health, safety, security, and environment (HSSE) kick-off meetings for site contractor personnel on May 7 and 14, 2014.

Task A – Pre-Design and Ongoing Site Monitoring

- Submitted updates to the U.S. EPA on May 16, 2014, for the site *Sampling and Analysis Plan for Surface Water and Groundwater* (SAP) and *Quality Assurance Project Plan for Surface Water and Groundwater* (QAPP) to document changes to the surface water and groundwater monitoring program.
- Submitted and posted the February 2014 Quarter 1 Surface Water and Ground Water Sampling and Flow Monitoring Reports to the project SharePoint site.
<https://www.aecomonline.net/projects/Rico/>
- Began the 2014 Peak Flow Sampling event on May 28, 2014. Groundwater samples were collected at 23 wells with 2 equipment blanks taken and 2 duplicate samples taken in May. The remainder of the groundwater samples and surface water samples will be collected the first week of June.
- An inspection of the ponds was performed on May 6, 2014. The inspection revealed no blockages or new concerns.

- Performed additional evaluation of potential improvements on surface water flow data gathering and telemetry. Continued work on the application for an antenna permit with the Town of Rico.

Task B – Management of Precipitation Solids in the Upper Settling Ponds

- The St. Louis Tunnel discharge was routed to Pond 15 during the Month of May 2014.
- On May 5, 2014, the site was accessed to observe the condition of the Pond 15 outlet and to perform a pond inspection. The pipe condition is currently stable and no additional erosion was observed at the separation of the bypass pipeline and the Pond 15 outlet.
- Continued drafting the 2014 Pond 14 Solids Removal Work Plan.

Task C – Design and Construction of a Solids Repository

- Received bids and awarded contract for the construction of the Phase 1 solids repository.
- Revised the Solids Repository Engineering Design and Operations Plan (EDOP) to incorporate comments from Colorado Department of Public Health and Environment (CDPHE) and submitted a draft to CDPHE on May 19, 2014.
- Submitted response to EPA comments dated April 5, 2014, regarding the Solids Repository EDOP on May 5, 2014.
- Continued work to secure lands needed for the solids repository.

Task D – Hydraulic Control Measures for the Collapsed Area of St. Louis Tunnel Adit

- Continued detailed design of the proposed St. Louis Tunnel hydraulic control remedy.

Task E – Source Water Investigations and Controls

- Continued Blaine Tunnel water depth and flow monitoring behind the Blaine Coffey Dam and Blaine Tunnel Flume.
 - Data was downloaded on May 6, 2014.
 - Water samples were collected from the Blaine Tunnel on May 6, 2014.
 - Conducted Blaine Tunnel reconnaissance on May 6, 2014, with in-tunnel support from the Colorado Department of Reclamation, Mining and Safety. Water was observed to be flowing through the flume at a depth of approximately 2.6 inches, corresponding to a flow rate of approximately 13 gallons per minute.

Task F – Water Treatment System Analysis and Design

- Continued pilot-scale wetland treatability study activities.
 - Flow through the pilot-scale wetland will be maintained until the matrix materials from the rock drain and wetland cell are re-used as inoculum for the wetland demonstration.
- Continued wetland demonstration treatability study activities.
 - Conducted a pre-construction site walk on May 6, 2014.
 - Surveyed as-built conditions and established grade stakes.
 - Commenced equipment mobilization clearing, grubbing, and pipe demolition.
 - Commenced excavation of the surface flow wetland basin.
 - AR discussed extending the construction completion date for the wetland demonstration system to August 15, 2014 during the May 6 meeting with EPA.

ACTIVITIES FOR UPCOMING MONTH

This section describes developments expected to occur during the upcoming reporting period, including a schedule of work to be performed, anticipated problems, and planned resolution of past or anticipated problems.



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Site-Wide Activities

- A meeting with EPA is scheduled for June 25, 2014 on site to follow-up on items discussed during the May 6, 2014 meeting.

Task A – Pre-Design and Ongoing Site Monitoring

- Inspect the St. Louis Ponds System, water levels, and free-board.
- Complete the 2014 Peak Flow water sampling event. Sampling will include groundwater sampling and sampling of all surface water locations. River elevations will be collected at DR-7 and DR-2 from the bank of the river to estimate the flow of the river using previous river bed surveys. Flow data will be downloaded from the transducers at DR-3 and DR-6.
- Continue work on submittal and processing of the application for a telemetry antenna permit for the Rico office building.

Task B – Management of Precipitation Solids in the Upper Settling Ponds

- Inspect the Pond 15 outlet: observe any changes in erosion.
- Continue routing St. Louis Tunnel discharge to Pond 15.
- Complete the 2014 Pond 14 Solids Removal Work Plan.
- Begin working on the 2014 Marine Assurance Plan and Marine Emergency Response Plan.
- Prepare scope of work package for Pond 14 solids removal work.

Task C – Design and Construction of a Solids Repository

- Continue work to secure the Dolores County Land Development Agreement and accompanying Certificate of Designation for the solids repository.
- Continue efforts to secure access to lands needed for the solids repository.
- Initiate construction of the Solids Repository.

Task D – Hydraulic Control Measures for the Collapsed Area of St. Louis Tunnel Adit

- Continue detailed design for the SLT hydraulic control system.
- Based on conversation with EPA, a plan is being developed in coordination with the contractor to install a pipeline from the debris plug to a point near the former lime addition building to convey water from the St. Louis Tunnel to the pond system. This pipeline will convey water currently flowing through the collapsed portion of the St. Louis Tunnel down gradient of the debris plug. This work would be completed in addition to the proposed pumping system to be installed in AT-2 as proposed in the Final Design Report, St. Louis Tunnel Hydraulic Control Measures Rico Argentine Mine Site – Rico Tunnels Operable Unit OU01 Rico, Colorado, dated April 30, 2014. With the addition of this pipeline, AR anticipates initiation of this work during July 2014.

Task E – Source Water Investigations and Controls

- None.

Task F – Water Treatment System Analysis and Design

- Continue pilot-scale wetland treatability study activities.
 - Maintain flow through the pilot-scale wetland until the matrix materials from the rock drain and wetland cell are re-used as inoculum for the wetland demonstration.
 - Perform sampling and monitoring in conjunction with the Peak Flow site-wide surface water and groundwater monitoring event.
- Continue wetland demonstration treatability study construction activities, including basin grading and compaction, flow control piping installation, and liner installation.



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- Continue scoping additional data needs as necessary related to treatment system alternatives.

If you have any questions, please feel free to contact me at (951) 265-4277.

Sincerely,



Anthony R. Brown
Project Manager
Atlantic Richfield Company

cc: R. Halsey, Atlantic Richfield
T. Moore, Atlantic Richfield
C. Harris, Atlantic Richfield
S. D'Cruz, Esq., Atlantic Richfield
C. Sanchez, Anderson Engineering
T. Kreutz, AECOM
D. Yadon, AECOM
J. Christner, Weston Solutions
S. Riese, EnSci
A. Cohen, Esq., Davis Graham & Stubbs
W. Duffy, Esq., Davis Graham & Stubbs
A. Piggott, Esq., U.S. EPA
M. Lombardi, AMEC
S. Archer, AMEC

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